

**REMARKS****Summary of the Outstanding Rejections**

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsukuda (U.S. Patent No. 7,359,305) (hereinafter "Tsukuda") in view of Yamada (U.S. Patent Application Publication No. 2002/0060967) (hereinafter "Yamada").

**Statement of Substance of Examiner Interviews and Applicant's Technical Remarks and Traversal of the Rejections**

United States Patent and Trademark Office Examiner Dionne Pendleton and Supervisory Patent Examiner Wayne Young are thanked for the courtesies extended to Applicant's undersigned representative in an Examiner interview conducted by telephone on September 11, 2009. The summary of the substance of the Examiner interview will be provided in the following discussion.

Applicant's undersigned representative began the technical discussion in the Examiner interview by referring to Fig. 1 of the instant application. Applicant's undersigned representative explained how the instant application pertains to an improved arrangement and methodology for recording a recording track (for example, T1 and T2 in Fig. 1) and a pit (for example, P1 in Fig. 1). More particularly, the recording track and the pit are both recorded utilizing a single recording electron beam which is deflected along a single path as shown, for example, in STEPs 1-4 of Fig. 1 of the instant application. Applicant respectfully submit that in the present invention both the recording track and the pit are recorded in a single turn of a disc by performing the recording while deflecting the single recording electron beam as discussed previously.

Applicant's undersigned representative went on to explain how, as described, for example, in the BACKGROUND ART portion of the instant application's specification, conventional arrangements typically utilize two separate beams along two separate paths, one beam and path for recording the recording track and a second beam and path for recording the pit. Applicant's undersigned representative explained how in the instant application's novel arrangement of recording both the recording track and the pit using a single beam and a single path, Applicant's overall device can be made much smaller than such conventional arrangements.

Applicant's undersigned representative then turned to a discussion of each of the applied references. With regard to the applied primary reference of Tsukuda, Applicant's undersigned representative explained that the Office Action applied this reference as teaching "recording the recording track by irradiating a single beam from a single electron optical system." Applicant respectfully submits that Tsukuda discloses an electron beam recorder including an electron optical system. Applicant's undersigned representative explained in the Examiner interview that Tsukuda is concerned with correcting variations in the position of the electron beam to a high accuracy during recording. See col. 3, lines 15-18 of Tsukuda. Applicant's undersigned representative went on to explain that Tsukuda discloses a deflection electrode (106 in Fig. 1) which adjusts the irradiation position of the electron beam.

Accordingly, Applicant's undersigned representative explained that Tsukuda is directed a particularly different type of machine than that of the instant application's disclosure because it does not teach or suggest recording both a recording track and a pit. Especially, Tsukuda does not teach or suggest recording both a recording track and a pit by deflecting a single beam from a signal electron optical system along a single path.

Turning now to the applied secondary reference to Yamada, Applicant's undersigned representative explained in the Examiner interview that Yamada discloses an arrangement similar to that discussed above with regard to the BACKGROUND ART portion of the specification of the instant application. More particularly, Yamada discloses, for example, in Fig. 1, two laser beams 105 and 106 that are irradiated from two sources 107 and 108 to record the recording track and pit, respectively. For example, Yamada discloses the laser beam 105 as being utilized for processing the groove 203 and the laser beam 106 as being utilized for processing the prepit groups 205 and 206. Fig. 1 of Yamada shows two separate laser beam spots 201 and 202 of the laser beams 105 and 106, respectively.

Accordingly, Applicant's undersigned representative explained in the Examiner interview that one having ordinary skill in the art would not be led to combine Tsukuda and Yamada in the manner suggested in the Office Action. More particularly, the arrangement of Tsukuda is a very different type of machine that does not record both a recording track and a pit. As a result, one having ordinary skill in the art would not see a need, or otherwise be motivated, to modify the arrangement of Tsukuda using the disclosure of Yamada for at least this reason.

In addition, Applicant's undersigned representative went on to explain that even assuming, strictly arguendo, that such a combination might be made, the resultant device would still include the two separate laser beams travelling along two separate paths to respectively record a recording track and a pit, as disclosed in Yamada. Accordingly, the single laser beam and single path arrangement of the instant application's claims would still not be met because neither Tsukuda nor Yamada teaches such an advantageous arrangement.

As noted previously, Tsukuda is not directed to a device for recording both a recording track and a pit. Instead, as discussed previously, Tsukuda is instead merely concerned with

adjusting the irradiation position of a single electron beam to record a single track by utilizing a deflection electrode 106. In other words, Tsukuda is not concerned with the objective or drawing or recording a recording track and a pit in an efficient manner. Instead, the disclosed deflection of the beam in Tsukuda is utilized to record or draw only information pit patterns, for example, accurately by the electron beam. The accuracy is improved by correcting the irradiation position. However, Tsukuda does not teach or suggest recording both a recording track and a pit using a single electron beam travelling along a single path in the manner disclosed in the instant application. Applicant respectfully submits that it would not be possible, or even conceived, to record or draw both a recording track and a pit based on the disclosure in Tsukuda of deflecting a beam.

In addition, Yamada is directed to an arrangement similar to that discussed in the BACKGROUND ART portion of the instant application's specification in which two beams are provided to respectively record a groove track and a prepit groups. As a result, Applicant respectfully submits that there would be no need in Yamada to adapt its disclosed arrangement to adopt the process of the claims of the instant application.

Even further, Applicant respectfully submits that in order to record a pit when a recording track is being recorded in this way, a very specific scheme must be devised. However, neither Tsukuda nor Yamada teaches, or even suggests, such a specific scheme for recording both a recording track and a pit using a single beam travelling along a single path in the novel manner described in the instant application's disclosure and claims.

During the Examiner interview, Examiner Pendleton responded to the technical explanations presented by Applicant's undersigned representative expressing that she understands the arguments, but the Examiner also noted that she will need to more closely

review the disclosure of Tsukuda in light of these technical explanations. More particularly, Examiner Pendleton noted that she will need to confirm for herself whether or not Tsukuda is in fact merely directed to an arrangement for adjusting the irradiation position of an electron beam so that a high accuracy of recording can be obtained, without teaching deflecting the single electron beam to also record a separate track or pit, for example, in the manner claimed in the instant application. Examiner Pendleton indicated that if she is able to confirm these points regarding the disclosure of Tsukuda, then she might agree, in that instance, that the Final Office Action's asserted combination rejection of Tsukuda and Yamada should be withdrawn. Examiner Pendleton went on to note that, if such is the case, then the finality of the Office Action dated June 9, 2009 would also be withdrawn.

Examiner Pendleton informed Applicant's undersigned representative that she would study this issue more closely and then she would contact Applicant's undersigned representative by telephone no later than Wednesday, September 16, 2009 to further discuss this issue. Supervisory Examiner Wayne Young then confirmed that Examiner Pendleton was taking the correct approach in this regard.

Examiner Pendleton placed a telephone call to Applicant's undersigned representative on September 16, 2009 and indicated that, after further consideration of the applied art, the Examiner and her supervisor now agree that independent claim 2 and its dependent claims 8 and 9 are in condition for allowance and that the rejections of record against independent claim 2 and its dependent claims 8 and 9 should be withdrawn. However, the Examiner indicated that she and her supervisor believe that the currently applied art of record still apply against the remaining claims of the instant application, including independent claims 1 and 4.

While Applicant does not necessarily agree that the currently applied rejections should be maintained against any of the claims of the instant application, for at least the foregoing reasons, in an effort to advance the prosecution of this application, and to avoid the issuance of an Advisory Action, claims 1 and 3-7 are hereby cancelled without prejudice or disclaimer. Accordingly, claims 2 and 8-9 are in prima-facie condition for allowance in light of the Examiner's indication of allowable subject matter in the above-described telephone discussion with Applicant's undersigned representative on September 16, 2009.

Accordingly, Applicant respectfully asserts that the rejections under 35 U.S.C. § 103(a) should be withdrawn because Tsukuda and Yamada, whether taken separately or combined, do not teach or suggest each feature of independent claim 2 of the instant application. As pointed out by MPEP § 2143.03, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)."

Furthermore, Applicant respectfully asserts that the dependent claims 8-9 are allowable at least because of their dependence from independent claim 2, and the reasons discussed previously.

### **CONCLUSION**

In view of the foregoing discussion, Applicant respectfully requests the entry of the amendments to place the application in clear condition for allowance or, in the alternative, in better form for appeal. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative to expedite prosecution. A favorable action is awaited.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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Dated: September 29, 2009

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